

REMARKS

By this amendment, claims 1-4 and 7 are pending, in which claims 5 and 6 have been previously canceled without prejudice or disclaimer, claim 1 is currently amended, and no claims are newly presented. No new matter is introduced.

The Office Action mailed November 14, 2007 rejected claims 1-4 and 7 as indefinite under 35 U.S.C. § 112, second paragraph, claims 1 and 7 as obvious under 35 U.S.C. § 103 based on *Yoshizawa et al.* (US 5,862,461) in view of *Hashimoto* (US 5,793,863), claim 2 as obvious under 35 U.S.C. § 103 based on *Yoshizawa et al.* (US 5,862,461) in view of *Hashimoto* (US 5,793,863), and further in view of *Loehner et al.* (US 5,347,239), claim 3 as obvious under 35 U.S.C. § 103 based on *Yoshizawa et al.* (US 5,862,461) in view of *Hashimoto* (US 5,793,863), and further in view of *Gattaz* (US 3,369,096), and claim 4 as obvious under 35 U.S.C. § 103 based on *Yoshizawa et al.* (US 5,862,461) in view of *Hashimoto* (US 5,793,863), and further in view of *Tomita et al.* (US 6,339,353).

As an initial matter, Applicants note that in the rejection of claim 2 (page 4, item 4 of the Office Action) the reference of “Barrett” is mentioned, which is contrary to the statement of the rejection (which applies *Loehner et al.* (US 5,347,239)). Therefore, Applicants assume that the Examiner intends to rely on *Loehner et al.* rather than *Barrett*.

With regard to independent claim 1, this claim has now been amended in order to provide a clearer antecedent basis for “the output-power setting mechanism of the signal source.”

With regard to independent claim 7, the Examiner contends that the language, “so that if a predetermined permitted level is exceeded at the output, the mechanical changeover switch at the output end disconnects the electronic attenuator from the output, and the mechanical

changeover switch at the input-end connects the electronic attenuator to the signal source” results in an open circuit and that somehow this is indefinite.

Applicants respectfully submit that the language of claim 7 is definite, as written. The Examiner is quite correct that the cited claim language results in an open circuit. This correlates to the language at page 6, lines 15-23, of the specification, explaining the embodiment wherein the position of the mechanical changeover switch when an over-voltage condition exists. The circuit is, indeed, open because a predetermined permitted level has been exceeded. The language is not indefinite but, rather an accurate description of the action taken when an over-voltage condition is detected. The language of claim 7 is accurate, and definite, as can be seen from a review of the drawing. In switch position I, the attenuator 5 is connected between the signal source 1 and the output 2, attenuating signals passing therethrough. In position II, the attenuator 5 is disconnected and bypass line 6 is connected between signal source 1 and output 2. However, when the over-voltage detector detects an over-voltage condition, it causes switch 3 to position I (connecting attenuator 5 to signal source 1), and switch 4 to position II (disconnecting the attenuator 5 from output 2), resulting in an open circuit in order to protect against over-voltage.

Accordingly, the language of claim 7 is correct and definite, within the meaning of 35 U.S.C. § 112, second paragraph, and the Examiner is respectfully requested to withdraw the rejection of claim 7, as well as the rejection of claims 1-4, under 35 U.S.C. § 112, second paragraph. However, Applicants would be receptive to suggestions by the Examiner as to how the language of claim 7 could be made any clearer in order to satisfy the Examiner. MPEP §2173.02 cautions that “[s]ome latitude in the manner of expression and the aptness of terms

should be permitted even though the claim language is not as precise as the examiner might desire.”

Applicants respectfully traverse the rejections of claims 1-4 and 7 under 35 U.S.C. § 103 because none of the applied references teach or suggest the claimed, “output-power setting mechanism” of claim 1 or the arrangement of the mechanical changeover switches as set forth in claim 7.

The Examiner appears to equate signal line control circuit 76 in Figure 7 of *Yoshizawa et al.* to the claimed “switchgear” (lines 1-2 of page 4 of the Office Action of November 14, 2007), referring to col. 11, lines 41-43 of the reference for the teaching of coupling an output-power setting mechanism of the signal source to the switchgear (signal line control 76). Col. 11, lines 41-50, of *Yoshizawa et al.* state the following:

... the control circuit 76 reads transmission power data "A" as information on a required signal level at a transmission antenna end. Next, at step SP12, the control circuit 76 reads a reference level "B" for switching the signal lines. In this event, the reference level is read instead of the signal level of an RF signal S3 because there are only two signal lines to be switched, so that it becomes necessarily aware which of the signal lines should be selected only by determining whether or not required transmission power exceeds the reference level.

Thus, signal line control circuit 76 of *Yoshizawa et al.* reads a reference level and a signal level in order to determine which signal line to choose, but no mechanism is taught by *Yoshizawa et al.* for setting the output power, i.e., there is no “output-power setting mechanism,” as claimed.

Moreover, at col. 11, lines 4-37, *Yoshizawa et al.* states the following (Emphasis added):

In case of the gain varying circuit 71, the signal line 74, one of the two signal lines, is formed of a transmission path without amplifier, while the other signal line 75 is provided with an amplifier 77 for amplifying electric power, for example, by 20 [dB]. Incidentally, electric power consumed by the amplifier 77 arranged in the signal line 75 is optimized in accordance with the gain value.

The signal line control circuit 76 outputs control signals S10, S11 to switch the signal line change-over switches 72, 73, thus **selecting one of the two signal lines 74, 75**. In this event, the signal line control circuit 76 examines a necessary signal level at a transmission antenna end to determine whether or not an RF signal S3 requires power amplification. **The signal line control circuit 76 selects the signal line 75 when the power amplification is required, and selects the signal line 74 when no power amplification is required.** For reference, when the signal line 74 is selected, the amplifier 77 is turned off by the signal line control circuit 76.

In this way, the gain varying circuit 71 switches the signal lines (74, 75) to perform the gain adjustment. In this event, the gain varying circuit 71 may take **two gain conditions: one is a 0 [dB] condition when the signal line 74 is selected, and the other is a 20 [dB] condition when the signal line 75 is selected.** As is apparent from this, the gain adjustment at the RF stage is discrete. However, in the transmitter circuit 70, since the IF stage is provided with a variable gain amplifier 5 capable of continuous gain adjustment, the continuous gain adjustment is performed by the variable gain amplifier 5 to compensate for the discrete gain adjustment at the RF stage. In other words, the transmitter circuit 70 produces a finally desired gain by the two elements: the gain varying circuit 71 performing discrete gain adjustment and the variable gain amplifier 5 performing continuous gain adjustment.

Thus, *Yoshizawa et al.* appears to provide for only two positions of switches 72 and 73; either they are both in the upper position in Fig. 7, selecting line 74, or they are both in the lower position in Fig. 7, selecting line 75. Accordingly, *Yoshizawa et al.* does not appear to provide for an open-circuit condition as provided by the language of claim 7, “so that if a predetermined permitted level is exceeded at the output, the mechanical changeover switch at the output end disconnects the electronic attenuator from the output, and the mechanical changeover switch at the input-end connects the electronic attenuator to the signal source.”

Accordingly, *Yoshizawa et al.* does not provide for the claimed “output-power setting mechanism” of independent claim 1 or the over-voltage condition position of the mechanical changeover switches of independent claim 7.

Further, independent claim 1 requires the switchgear to be “coupled to the output-power setting mechanism **of the signal source**”; and independent claim 7 requires the switchgear to be

“coupled to an over-voltage detector assigned to the output **of the signal source**.” Thus, the claims require the output-setting mechanism or the over-voltage detector to be “of the HF signal source.” This is shown in Applicants’ drawing where the switchgear is coupled to both the output-power setting mechanism and the over-voltage detector, with the output-power setting mechanism being coupled to source 1 and the over-voltage detector assigned to the source 1 and coupled to the switchgear. However, *Yoshizawa et al.* shows no such switchgear “coupled to the output-power setting mechanism **of the signal source**” or switchgear “coupled to an over-voltage detector assigned to the output **of the signal source**.” It is not exactly clear what, in *Yoshizawa et al.*, the Examiner relies on for the claimed “output-power setting mechanism”; however, it is certain that there is no such output-power setting mechanism coupled to the signal source at S1 in Fig. 7.

The deficiencies of *Yoshizawa et al.* are not cured by the secondary references. Therefore, the rejections of claims 1-4 and 7 under 35 U.S.C. § 103 are improper; and the Examiner is respectfully requested to withdraw same. *Hashimoto* is applied solely for the teaching of using mechanical switches as changeover switches. *Loehner et al.* is relied upon for a supposed teaching of an attenuation network. The Examiner utilizes *Gattaz* for a supposed disclosure of a coaxial changeover switch, and *Tomita et al.* for a teaching of a mechanical changeover switch that comprises transfer switches.

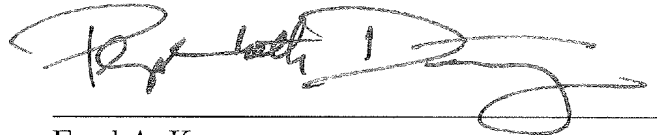
Therefore, the present application, as amended, overcomes the rejections of record and is in condition for allowance. Favorable consideration is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at (703) 519-9952 so that such issues may be resolved as expeditiously as possible.

Respectfully Submitted,

DITTHAVONG MORI & STEINER, P.C.

February 14, 2008

Date



Errol A. Krass

Attorney/Agent for Applicant(s)

Reg. No. 60,090

Phouphanomketh Ditthavong

Attorney/Agent for Applicant(s)

Reg. No. 44,658

918 Prince Street
Alexandria, VA 22314
Tel. (703) 519-9952
Fax. (703) 519-9958